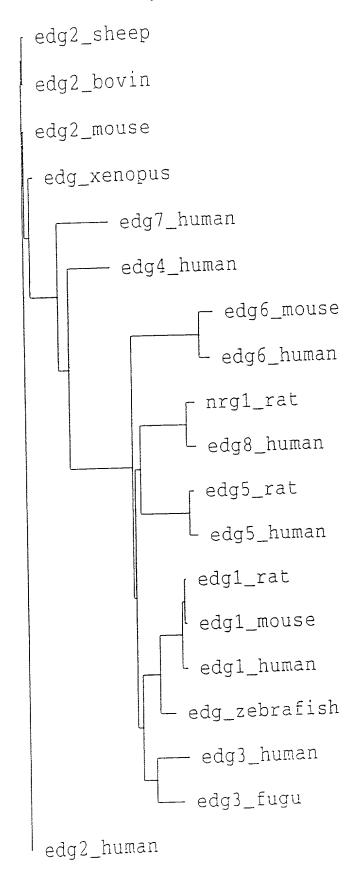
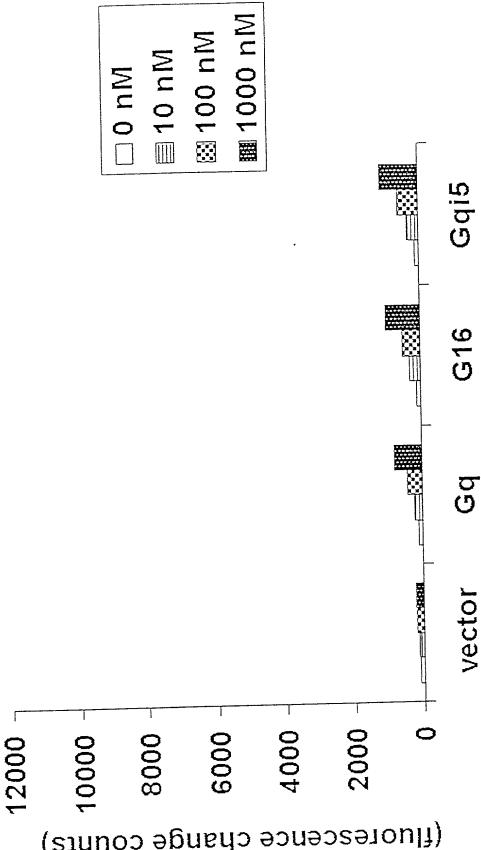
FIG 1A:

- 1 ATGGAGTCGGGGCTGCTGCGGCCGGCGCGCGGTGAGCGAGGTCATCGTCCTGCATTACAAC M E S G L L R P A P V S E V I V L H Y N
- 61 TACACCGGCAAGCTCCGCGGTGCGCGCCTACCAGCCGGGTGCCGGCCTGCGCGCCGACGCC
 Y T G K L R G A R Y Q P G A G L R A D A
- 121 GTGGTGTGCCTGGCGGTGTGCGCCTTCATCGTGCTAGAGAATCTAGCCGTGTTGTTGGTG V V C L A V C A F I V L E N L A V L L V
- 181 CTCGGACGCCACCCGCGCTTCCACGCTCCCATGTTCCTGCTCCTGGGCAGCCTCACGTTG L G R H P R F H A P M F L L L G S L T L
- 241 TCGGATCTGCTGGCAGGCGCCGCCTACGCCGCCAACATCCTACTGTCGGGGCCGCTCACG
 S D L L A G A A Y A A N I L L S G P L T
- 361 GCGTCCGTGCTGAGCCTCCTGGCCATCGCGCTGGAGCGCAGCCTCACCATGGCGCGCAGG
 A S V L S L L A I A L E R S L T M A R R
- 481 GTGTCGCTGCTCCTGGGCTCCTGCCAGCGCTGGGCTGGAATTGCCTGGGTCGCCTGGAC V S L L L G L L P A L G W N C L G R L D
- 541 GCTTGCTCCACTGTCTTGCCGCTCTACGCCAAGGCCTACGTGCTCTTCTGCGTGCTCGCC A C S T V L P L Y A K A Y V L F C V L A
- 601 TTCGTGGGCATCCTGGCCGCTATCTGTGCACTCTACGCGCGCATCTACTGCCAGGTACGC F V G I L A A I C A L Y A R I Y C Q V R
- 721 CGTCGCAAGCCGCGCTCGCTGGCCTTGCTGCGCACGCTCAGCGTGGTGCTCCTGGCCTTT R R K P R S L A L L R T L S V V L L A F
- 781 GTGGCATGTTGGGGGCCCCCTCTTCCTGCTGCTGTTGCTCGACGTGGCGTGCCCGGCGCGCCC V A C W G P L F L L L L D V A C P A R
- 841 ACCTGTCCTGTACTCCTGCAGGCCGATCCCTTCCTGGGACTGGCCATGGCCAACTCACTT T C P V L L Q A D P F L G L A M A N S L
- 901 CTGAACCCCATCATCTACACGCTCACCAACCGCGACCTGCGCCACGCGCTCCTGCGCCTG
 L N P I I Y T L T N R D L R H A L L R L
- 961 GTCTGCTGCGGACGCCACTCCTGCGGCAGAGACCCGAGTGGCTCCCAGCAGTCGGCGAGC V C C G R H S C G R D P S G S Q Q S A S
- 1021 GCGGCTGAGGCTTCCGGGGGCCTGCCCGCCCCCGGGCCTTGATGGGAGCTTC A A E A S G G L R R C L P P G L D G S F
- 1081 AGCGGCTCGGAGCGCTCATCGCCCCAGCGCGACGGGCTGGACACCAGCGGCTCCACAGGC S G S E R S S P Q R D G L D T S G S T G
- 1141 AGCCCCGGTGCACCCACAGCCGCCCGGACTCTGGTATCAGAACCGGCTGCAGACTGA S P G A P T A A R T L V S E P A A D *



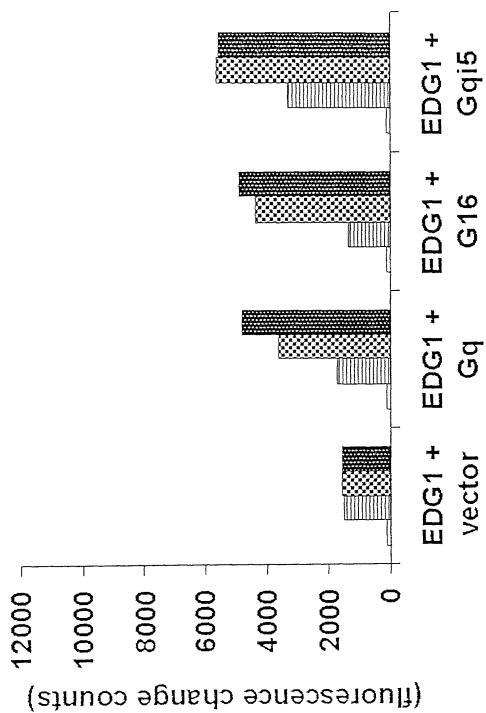
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edgl human -----MG2TS V2LVKAHRSS VSDYVNYDII VRHYNYTGKL ..NISADKEN SIKITSVVZI
edg5 human ------MGSL YSEYLNPNKV QEHYNYTKE. ..TLETQETT SRQYASAFIV
edg8 human -----MESGL LRPAPVSEVI VLHYNYTGKL RG.ARYQPGA GLRADAVVCL
edg6 human -----MNATG TPVAPESCQQ LAAGGHSRLI VLHYNHSGRL AGR.GGPEDG GLGALRGLEV
edg2 human TVCIFIMLAN LLVMVAIYYN RRFHEPIYYL MANLAAADEF AGLAYFYLMF MIGPNTRRLT
edg7 human | FECLETEESN SLVIAAVIKN RKEHEPEYYL LANLAAADEF AGIAYVFLME NTG2VSKTLT
edg4 human TVSVLVLLTN LLVIAAIASN RREHQPIYYL LGNLAAADLE AGVAYLELME HIGERTARLS
edgl human | LICCFILLEN IEVLLTIMET KKEHPPMYYE IGNLALSDLL AGVAYTANLL ISGATTYKLT
edg3 human VICSFIVLEN LMVLIAIWKN NKEHDRMYFF IGNLALCOLL AGIAYKVNIL MSGKKTFSLS
edgs human ILCCAIVVEN LLVLIAVARN SKEHSAMYLE LGNLAASOLL AGVAEVANTL LSGSVTLRLT
edg8 human AVCAFIVLEN LAVLLVLGH PREHAPMELL LGSLTLSDLL AGAAYAANIL LSGPLTLKLS
edg6 human AASCLVVLEN LLVLAALTSH MRSRRWVYYC LVNITLSDLL TGAAYLANVL LSGARTERLA
edg2 human VSTWLLRCGL IDTSLTASVA NLLAIAIRH ITVFR.MQLH TRMSNRRVVV VIVVIWTMAT
edg7_human VNRWFLRCGL LDSSLTASLT NLLVIAVTRH MSIMR.MRVH SNLTKKRVTL LILLVWAIAT
edg4 human LEGWELRGI LDTSLTASVA TLLAIAVERH RSVMA.VQLH SRLPRGEVVM LIVGVWVAAI
edg1 human paqwelregs mevalsasve sllaiaiery itmlk.mklh ngsnnerlel lisacwvisi
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edg5 human FVQWFAREGS ASITLSASVF SLLAIAIERH VAIAK.VKLY GSDKSCFMLL LIGASWLIST
edg8 human PALWFAREGG VFVALTASVL SLLAIALERS LTMAR.RGPA PVSSRGRTLA MAAAAWGVSI
edge human PAQWELREGL LETALAASTE SLLETAGERE ATMVRPVAES GATKTSRVYG EIGLCWLLAA
edg2 human VMGAIPSVGW NCICDIENCS NMAPLYSDGY LVEWAIENLV TEVVMVVLYA HIEGYVRQRT
edg7 human FMGAVPTLGW NCLCNISACS SLAPIYSRYY LVFWTVSNLM AFLIMVVVYL RIYVYVKRKT
edg4 human | GLGLLPAHSW | HCLCALDRCS RMAPLLSRSY LAVWALSSLL VFLLMVAVYT | RIFFYVRRRV
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edg5_human | VLGGLPILGW | NCLGHLEACS TVLPLYAKHY VLCVVTIFSI ILLAIVALYV | RIYCVVRSSH
edg8 human LLGLLPALGW NCLGRLDACS TVLPLYAKAY VLFCVLAFVG ILAAICALYA RIYCQVRANA edg6 human LLGMLPLLGW NCLCAFDRCS SLLPLYSKRY ILFCLVIFAG VLATIMGLYG AIFRLVQASG
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edgl human RRLTFR.... KNISKASRS SENVALLKTV IIVLSVETAC WAPLFILLLL DV.GCKVKTC
edg8 human RRLPARPGTA GTTSTRARRK PRSLALLRTL SVVLLAFVAC WGPLFLLLLL DV.ACPARTC
edg6 human QKA2......RPAARRK ARR..LLKTV LMILLAFLVC WGPLFGLLLA DVFGSNLWAQ
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edg4 human NVLAVETYFL LLAEANSLVN AAVYSCRÞAE MRRTFRRLLC CACLROSTRE SVHYTSSACG edg1 human DILFRAGYFL VLAVLNSGTN PILYTLTJKE MRRAFIRIMS CCKCPSGD.......S
edg5_human PILYKAHYFF AVSTLNSLLN PVIYTWR$RD LRREVLRPLQ CWRPGVGV......Q
edg8 human PVLLQAQPFL GLAMANSLLN PITYTLTTRD LRHALLRLVC CGRHSCGRDP SGS..QQSAS edg6 human SYLRGMDWIL ALAVINSAVN PITYSFTSRE VCRAVLSFLC CGCLRLGMRG PGDCLARAVE
            361
edg4 human GASTRIMLPE NGHPLMTPPF SYLELQRYAA SNKSTAPOOL WVLLAQPNQQ D-----
edgl_human AGKFKRPIIA GMEFSRSK.. .SDNSSHPQK DEGDNPETIM SSGNVNSSS- ------
edg3_human RGARASPIQP ALDPSRSKSS SSNNSSHSPK VKEDLPHTDP SSCIMDKNAA LQNGIFCN
edg5_human GRRRVGTPGH HLLPLRSSSS LERGMHMPTS PTFLEGNTVV ------ ------
edg8 human AAEASGGLRR CLPPGLDGSF SGSERSSPQR DGLDTSGSTG SPGAPTAART LVSEPAAD
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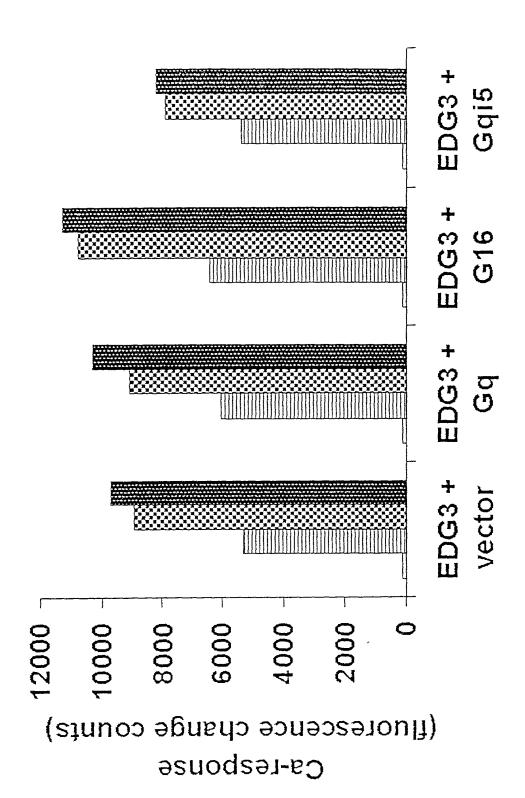


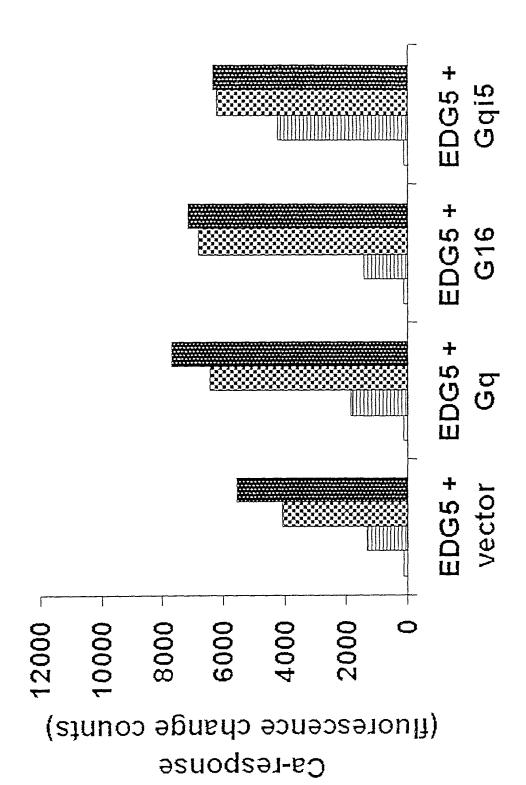
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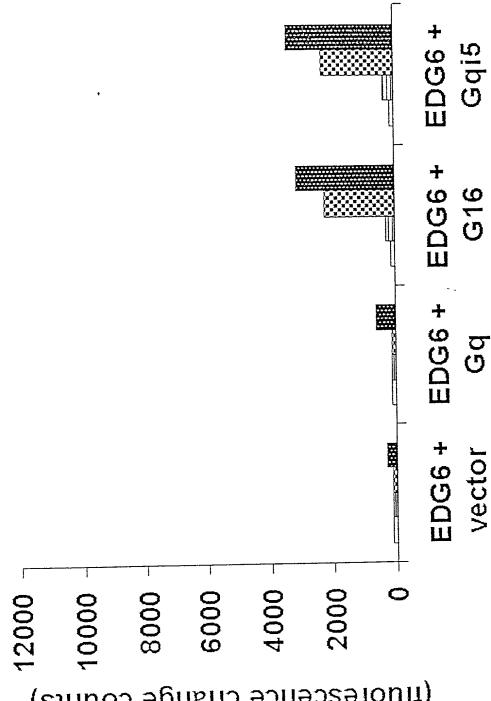
Ca-response (fluorescence change counts)



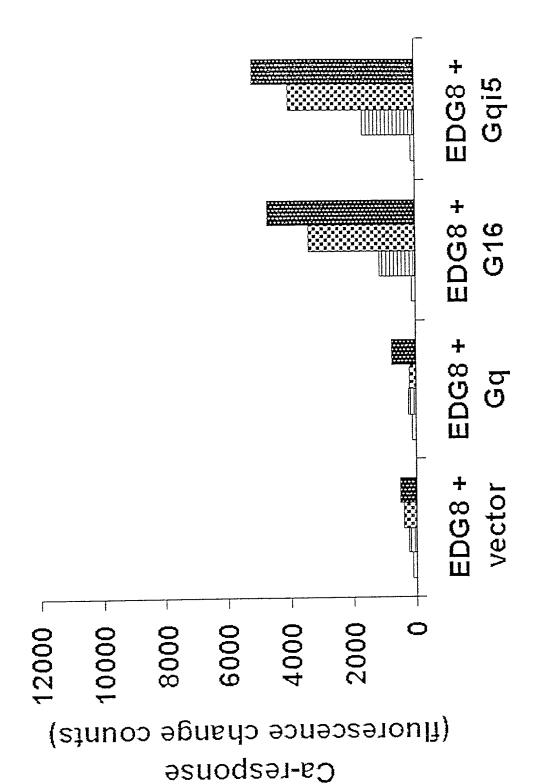
Ca-response (fluorescence change counts)



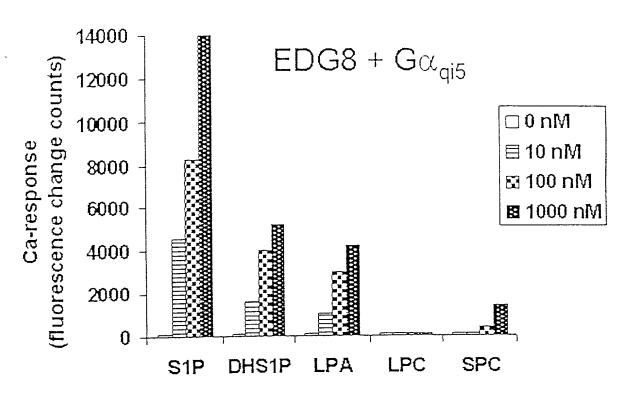




Ca-response (fluorescence change counts)



moratilite dili



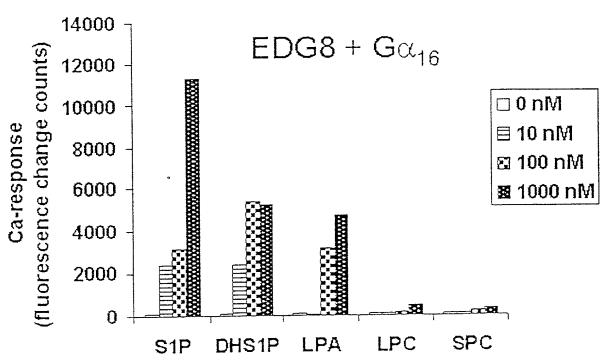
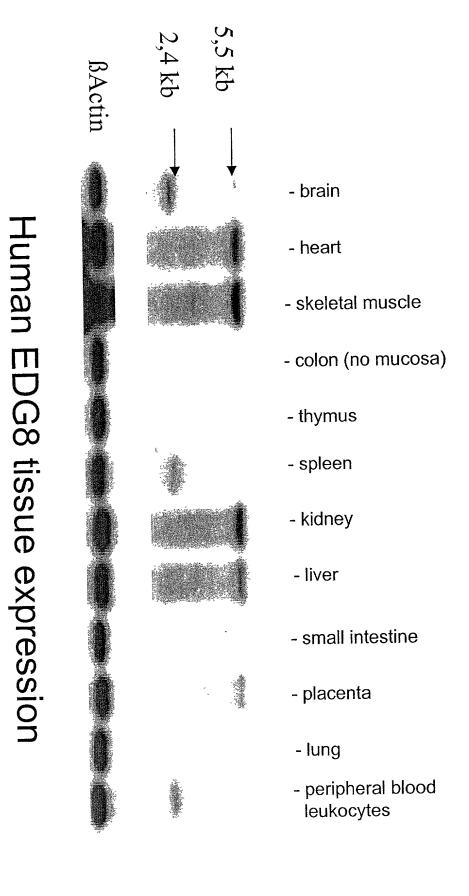
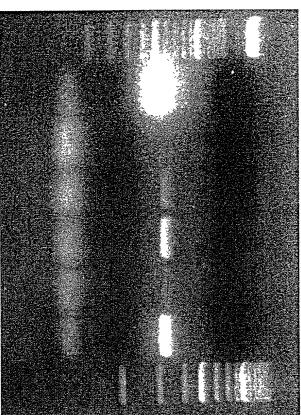


FIG 4



522 bp**---**



Pos. control
neg. control
HUVECS
HUVECS
HIVECL
HPAEC

FIG 5B



EDG-123456780

Fig. 6A

qi5 background

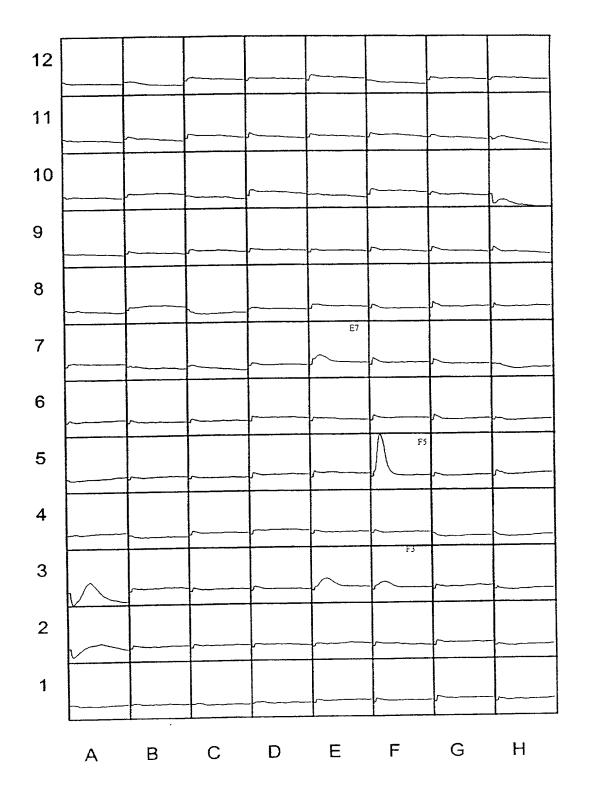
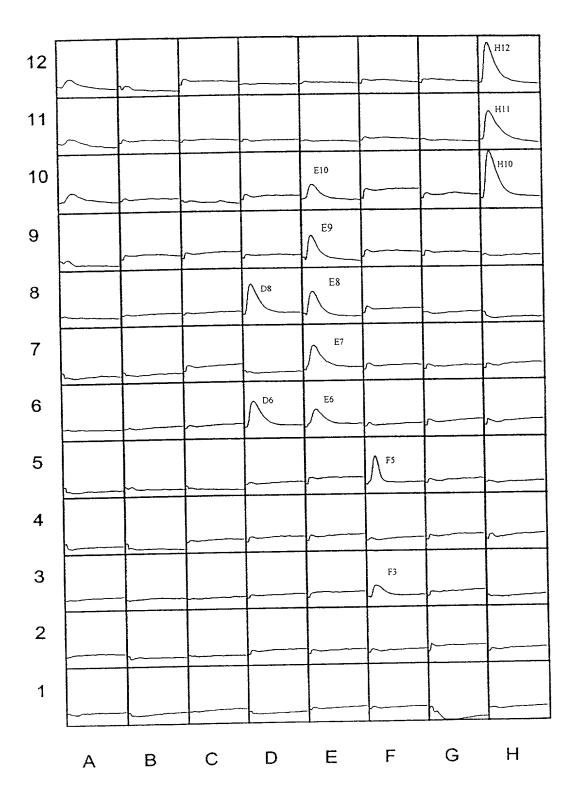


Fig. 6B

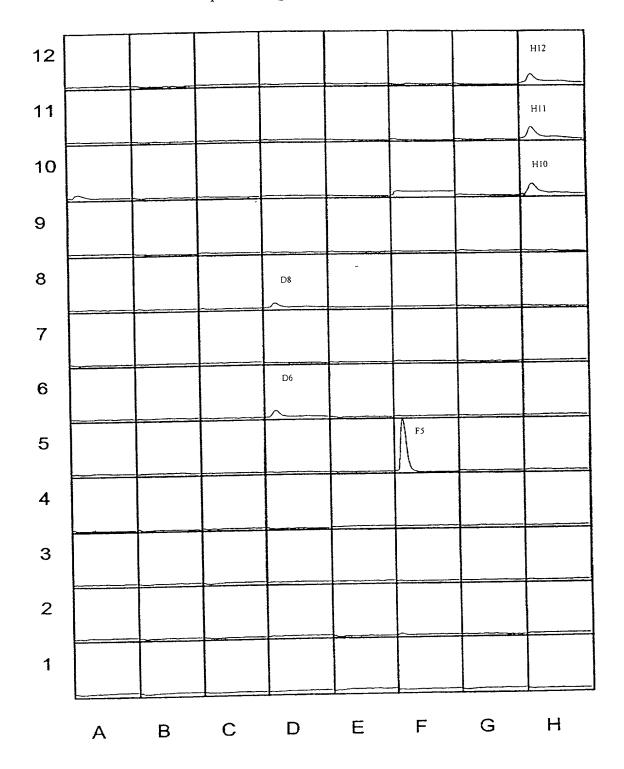
rEDG8



Fluorescence Change counts

Wells	Lipid	background	rEDG8	stand. response
H10-H12	1uM S1P	0	5196	5196
F.5	1uM LPA	5893	4327	-1566
F3	1uM cPAF	1017	1570	553
F 10	1 _{UM} EPA PAF	0	1354	1354
<u>р</u>	1uM AA PAF	0	3121	3121
) <u>п</u>	111M Enantio PAF	0	3883	3883
П7	1uM paf C18:1	1256	3765	2509
ПS	1 N I VSO PAF	0	2421	2421
200	1 uM dhS1P	0	5144	5144
90	1uM S1P	0	3672	3672
2				

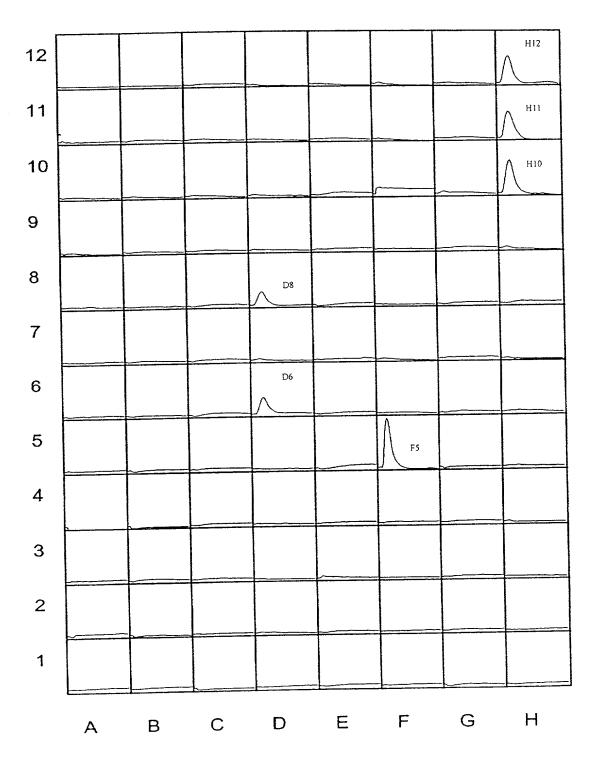
Fig. 7A qi5 background in HEK



Althir . . .

Fig. 7B

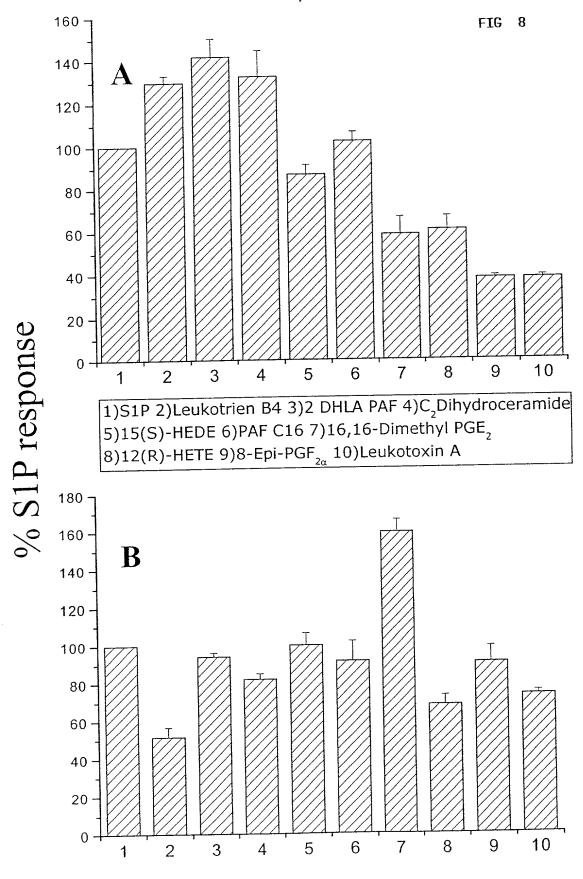




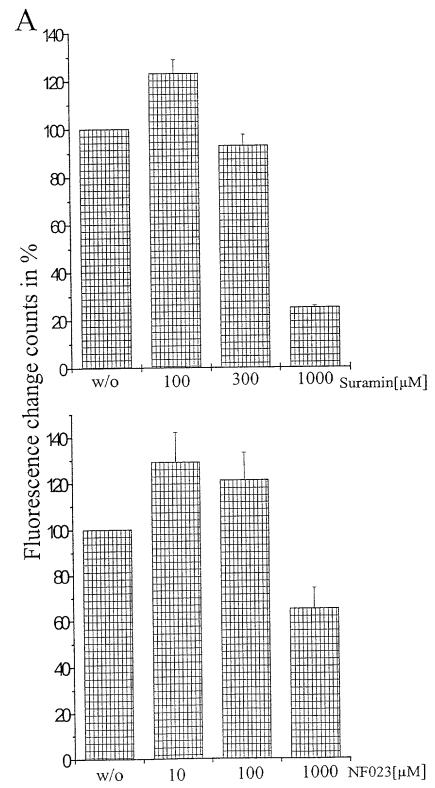
Fluorescence change counts

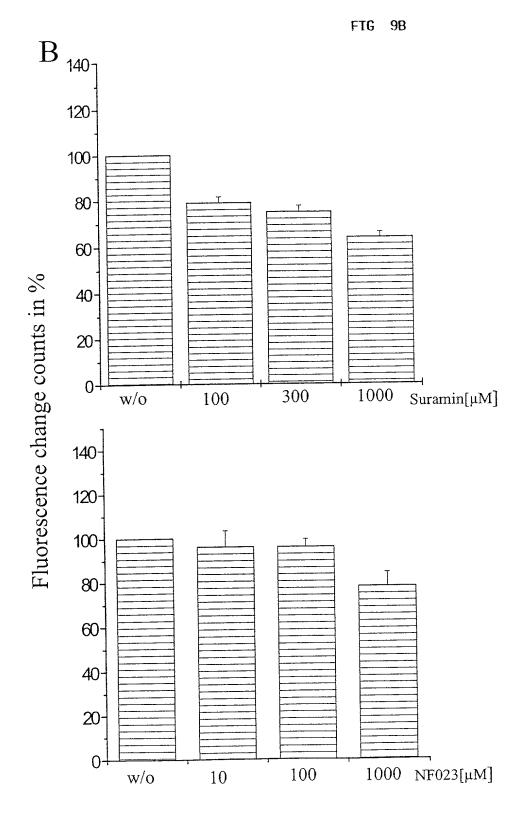
Wells	Lipid	background	hEDG8	stand. response
H10-H12	1µM S1P	3696	9493	2629
F5	1µM LPA	18004	16333	-1671
D8	1µM dhS1P	1683	4522	2839
D6	1µM S1P	2273	5605	3332

Fig. 7C



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